

Report to the Drainage Review Board

Prepared by the Maricopa County Planning and Development Department

Case: BA2005193 Drainage variance

Hearing Date: May 10, 2006 (Continued from April 12, 2006)

Agenda Item: 1

Supervisory District: 1

Applicant/Owner: Arroyo Pacific Partners, LLC

Request: **Variance to:**

Permit on-lot retention for lots less than one acre in area where one acre is the minimum required.

This variance is requested from the following Drainage Regulation Section(s):

Section 603, Article 603.2.d

Site Location: 17901 East Riggs Road – Tangelo Avenue and Riggs Road (Gilbert area)

Site Size: 925,981 square feet (21.26 acres)

Existing Zoning: R-4

Current Use: Vacant

**Citizen
Support/Opposition:** None known

**Staff
Recommendation:** Deny

Existing On-Site and Surrounding Zoning:

1. On-site: R-4
North: SF-35 (Town of Gilbert)
South: R-4
East: R-4
West: R-5

Existing On-Site and Surrounding Land Use:

2. On-site: Vacant
North: Riggs Road then single-family residences (Seville DMP)
South: Single-family residences
East: Lemon Avenue/vacant
West: Tangelo Avenue/single-family residences

Background:

3. **July, 17, 1930:** The Chandler Heights Citrus Tract Unit 3626 subdivision was recorded. The subject site is located on Lot 9 of this subdivision.
4. **August 20, 2004:** The current owner took title to parcel 304-88-031 (subject site) via a Warranty Deed recorded under docket number **051483454**.
5. **December 8, 2005:** The Planning and Zoning Commission approved case **S2005056**, the preliminary plat for Sonterra, subject to stipulations, including stipulation 'r' requiring the applicant to obtain an approved Drainage Variance from the Drainage Review Board.
6. **December 19, 2005:** The applicant submitted Drainage Review Board variance case **BA2005193**.
7. **February 28, 2006:** Staff met with the applicant and his engineer to discuss changes in the redesign of the on-site drainage for the Sonterra subdivision.
8. **March 8, 2006:** The applicant modified the layout of the proposed Sonterra subdivision. A common retention basin is now included that will accommodate some of the storm water runoff, particularly from the interior streets; however, on lot retention is still proposed in the rear yard of each lot.
9. **April 12, 2006:** This case was forwarded to the May 10, 2006 hearing date due to a lack of quorum.
10. **May 3, 2006:** The Board of Supervisors will hear case **Z2005006** to voluntarily rezone properties (including the site of the proposed Sonterra subdivision) in the Chandler Heights

area (a maximum of 1,280 acres) from R-4 and R1-35 to Rural-43 RUPD. Staff and the Planning and Zoning Commission recommend approval subject to the following stipulations:

- a. Case Z2005006 shall rezone parcels from R1-35 and R-4 to Rural-43 RUPD as indicated on the zoning exhibit entitled "Proposed Zoning Boundary Map (Project Name: Chandler Heights RUPD, Case Number: Z2005006)" and dated January 1, 2006, except as modified by the following stipulations.
- b. Only parcels for which written property owner authorization has been received from the property owner of record shall be considered to be rezoned from R1-35 and R-4 to Rural-43 RUPD as per case Z2005006.
- c. In the event that property owners within the perimeter boundary shown on the zoning exhibit referenced in stipulation 'a' (Hunt Hwy. on the south; 172nd St., San Tan Blvd., and Recker Rd. on the west, Riggs Rd. on the north, and Sossaman Rd. on the east) wish to rezone their individual parcels from R1-35 and R-4 to Rural-43 RUPD with the same RUPD standards to apply, the Commission shall initiate a rezone on their behalf.
- d. Development and use within the Rural-43 RUPD zoning district shall comply with the site plan and narrative report entitled "Site Plan (Project Name: Chandler Heights RUPD Case #Z-2005006)" consisting of 16 pages including exhibits and sections under different title pages, dated January 1, 2006, except as modified by the following stipulations.
- e. The use regulations, height regulations, parking regulations and sign regulations of the Rural-43 RUPD zoning district are the same as the Rural-43 zoning district.
- f. The yard regulations of the Rural-43 RUPD zoning district are the same as the R-4 zoning district.
- g. The intensity of use regulations of the Rural-43 RUPD zoning district are the same as the R1-35 zoning district except that:
 - The average lot area per dwelling unit shall be 43,560 sq. ft.
 - The minimum lot width shall be 120'.
- h. Any parcel rezoned under case Z2005006 that is substandard or otherwise nonconforming in regard to the Rural-43 RUPD zoning district must document Legal Non-Conforming (LNC) status with the Planning & Development Department. It is the responsibility of the property owner to document LNC status.
- i. There shall be no relief granted to the development standards of the Rural-43 RUPD development standards except with Variance approval by the Board of Adjustment.

- j. Secondary dwelling units (guest homes, casitas, etc.) shall be allowed in the Rural-43 RUPD zoning district with demonstration of adequate liquid waste disposal at the discretion of the Environmental Services Department.
- k. Any subdivision plat within the Rural-43 zoning district shall include the following RUPD Chart:

Development Standard	Z2005006 Rural-43 RUPD
Avg. Lot Area / D.U.	43,560 sq. ft.
Min. Lot Area	35,000 sq. ft.
Min. Lot Width	120'
Max. Lot Coverage	20%
Min. Distance Between Buildings	15'
Min. Front Setback	20'
Min. Rear Setback	25'
Min. Side Setback	5'
Min. Street-Side Setback	10'
Max. Building Height	30' (2 stories)
Off-Street Parking	2 / d.u.
Signs	Same as Rural-43
Uses	Same as Rural-43
Accessory Dwelling Units	One (1) secondary dwelling unit allowed with MCESD approval of liquid waste disposal system

- 11. **December 7, 2005:** The Board of Directors of the Chandler Heights Citrus Irrigation District (CHCID) agrees to provide domestic water service to the proposed Sonterra subdivision with the stipulation that the lots be irrigated.

Findings:

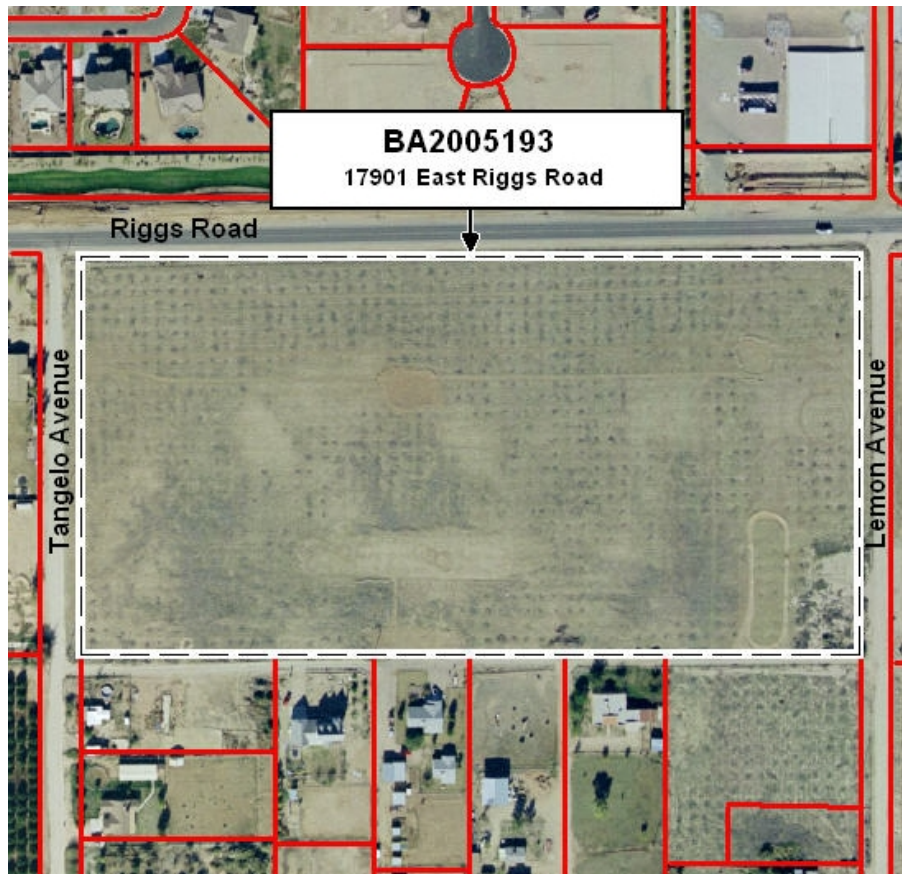
- 12. **Maricopa County Department of Transportation:** No response at the time this report was written.
- 13. **Flood Control District:** No response at the time this report was written.
- 14. **Environmental Services Department:** No objection subject to sign-off from Drainage Review (see attached memo).
- 15. **Drainage Review:** Does not recommend approval of the request (see attached memo and e-mail).

Site Analysis:

16. The proposed subdivision of Sonterra comprises the subject site for this drainage variance request. The subject site is a rectangular shaped, proposed subdivision located in the Gilbert area. Sonterra is 1,260 feet wide at its northern boundary and approximately 660 feet deep for a total gross area of 925,981 square feet or approximately 21.2 acres. The property fronts on Riggs Road to the north, Lemon Avenue to the east, and Tangelo Avenue at the west.
17. The original preliminary plat submitted for the Sonterra subdivision showed 19 lots and no open space tracts. The March 8, 2006 revision (final plat attached) shows 19 lots and one approximately 16,900 square foot tract as a retention basin. This retention basin as well as the interior streets will be owned and maintained by a homeowners association.
18. The site is level, clear of vegetation, and free of any physical or topographical hardships. The subject property has been used for agricultural purposes in the past with no portion of the property being actively farmed at this time. Like many of the surrounding parcels, the subject site served as a citrus orchard in the past but there are no longer any citrus trees on-site. A portion of the site in the southeast corner has been used for illegal trash dumping. The applicant is cleaning the site in anticipation of development.
19. The proposed subdivision layout is conventional in nature with a single gated entry and two cul-de-sacs to the east and west. Lot configurations are split between irregularly shaped lots and rectangular lots. Lot sizes range from 35,001 square feet to 35,983 square feet. Potable water will be provided by the Chandler Heights Citrus Irrigation and Water District (CHCID). Wastewater disposal will be via individual septic systems.
20. The applicant has requested a drainage variance to the Maricopa County Drainage Regulations, Section 603 - Design Parameters, Article 603.2.d, which states, "*Individual lot retention shall not be permitted in single family residential developments with a lot size less than one gross acre.*" The applicant proposes the majority of on-site stormwater flow to be retained on the individual subdivision lots. A common retention basin will accommodate a portion of the site's stormwater runoff. The applicant is not amiable to a larger common retention basin or system of basins that would accommodate all of the subdivision's stormwater runoff because that would necessitate the loss of at least two of the 19 proposed lots.
21. There is one point of access proposed to serve the subdivision, a gated entry from Riggs Road to the north. Riggs Road forms the northern boundary of the subdivision. It is currently under construction and has a potential, ultimate 70 foot half-width, right-of-way. There is an ingress/egress easement below the southern boundary of the subdivision that provides access to the parcels south of the proposed subdivision. A

secondary access point will be located on Tangelo Avenue and will have a “crash gate” for emergency access only. No eastern access is provided for this development.

22. The site is shown in the following 2005 air-photo.



Land Use Analysis:

23. The site is located to the south of Riggs Road between Tangelo Avenue and Lemon Avenue in the Chandler Heights area. This location is within the Town of Queen Creek's municipal planning area. The Town of Queen Creek is located ½-mile to the east and the Town of Gilbert is adjacent to the site on the north. The Gila River Native American Community and the Pinal County line are located ¾ of a mile to the south.
24. The surrounding area is a mix of newer higher density subdivisions and established low density residential and rural agrarian uses. Land uses surrounding the site consist of site-built, single-family homes with some remaining portions of citrus orchards, row-crops and fallow agricultural fields to the east. Seville is a master planned community to the northwest in the Town of Gilbert and consists of approximately two square miles of mixed density single-family housing. Much of the immediate area in both Gilbert and Queen Creek is being developed through the subdivision process.
25. Sonterra is located in Chandler Heights, a four square mile unincorporated area that is a Class IIa County Island. The immediate area is zoned R-4 and R-5 and the applicant

is proposing to retain the underlying R-4 zoning but develop parcels more in line with R1-35 zoning, the smallest being greater than 35,000 square feet. The density of the proposed subdivision is 0.94 dwelling units per acre.

26. There is currently a grassroots effort to rezone the Chandler Heights area, including the Sonterra subdivision, to Rural-43 RUPD under zoning case Z2005006. The purpose of Z2005006 is to allow the liberal development standards of the current zoning districts except to promote lots of at least $\frac{3}{4}$ of an acre in area (similar to those being proposed at Sonterra) and to allow single-family residential and agricultural uses. This is being done to preserve the semi-rural, agrarian/equestrian nature of the Chandler Heights area while not allowing multi-family residential uses presently allowed with R-4 zoning if sewer service were made available. The current zoning in the general area is a mix of R-4, R-5, R1-8, R1-35 and C-3 dating from the 1950s.
27. Staff research indicates that no relevant Drainage Review Board cases have been heard on properties within one mile of the subject property.

Plan Analysis:

28. The applicant is proposing to allow for on-lot retention for lots less than one acre in area where one acre is the minimum required by the Drainage Regulations for Maricopa County. In the Supplemental Questionnaire submitted with the drainage variance request for the Sonterra subdivision, the applicant has proposed that all lots in the subdivision will be independently flood irrigated and each lot will be "built to retain its own drainage water as well as irrigation". The applicant has further stated the lots "will be graded to retain both irrigation and drainage on site, which necessitated berming and creates practical difficulties and unnecessary hardship for the development to comply with the drainage regulation in the ordinance." Originally, there were no defined tracts for retention in the preliminary plat with each of the privately owned parcels accommodating "a proportionate volume of the site retention requirements". The total proposed retention for the entire subdivision in the event of a 100 year/2 hour event is 2.14 acre feet or 697,322 gallons of water. Recent modifications to the proposed subdivision plat added a 16,882 square foot retention basin following the reduction in size of Lots 1 - 6. However, even with these project modifications, Drainage Review staff cannot recommend approval of a drainage variance for on-lot retention on lots of less than one acre.
29. The primary question with this drainage variance request is the long term upkeep of the on-lot retention facilities by individual property owners. The common retention basin will be maintained by a homeowners association. The modified Sonterra project proposes septic systems for all lots to be in the front yard only and for storm water in the front yard of each lot to drain to the street where it will be conveyed to the common retention basin. However, storm water runoff for the building envelope and rear yard, or the rear two-thirds of each lot, will be subject to on lot retention.

30. Maintaining on-site retention is a factor which cannot really be controlled by the County or the applicant and it raises some cause for concern. A future homeowner could reconfigure their rear yard and effectively remove any retention features allowing all or a portion of their flows to be transferred to another parcel or to an off-site location. If just a few of parcels were to do the same, it could shift the proposed on-site retention to the roadways (where it would result in overtopping of the common retention basin now proposed) or to a neighbor's property. Staff would recommend that either all the retention be accommodated via a system of common retention basins in separate subdivision tracts or that each of the proposed lots be a minimum of one acre.
31. Riggs Road has an ultimate half-width of 70 feet. With continued growth of subdivisions and master planned communities in the area, widening Riggs Road may occur sooner rather than later. Widening will increase the outflow of stormwater to those properties that front on Riggs Road. The applicant states that "on-site basins will accept the adjacent roadway flows and have been sized accordingly". Staff is concerned that the applicant has not adequately shown, that with future roadway widening, the flows generated from that widened roadway would not exceed the currently predicted flows.
32. A second concern would be how on-lot retention will be used in conjunction with septic systems. The modified Sonterra subdivision project proposes liquid waste disposal via individual on-site septic systems for each lot. The plat will include a note stating that all septic systems shall be within the front yard on each lot only. This project modification was due to Environmental Services staff review and requirement that the septic systems must be protected from contamination by on-lot retention – necessitating placement of the septic system in the front yard and the on-lot retention in the rear. The septic system would then need to be engineered to prevent stormwater flow contamination. Environmental Services will require a set of lot specific diagrams for each lot, showing the following: property lines, building area, projected septic location, projected retaining areas.
33. Staff has included stipulations regarding maintenance and upkeep, septic protection and water supply for irrigation to attempt to ensure that the proposed variance will pose no hazards on the subject site or surrounding properties.
34. It is continuing opinion of Drainage Review staff that this variance request to allow on-lot retention for residential lots less than one acre should be denied. The Drainage Regulations list several criteria for granting approval of a variance, each of which must be met. The intent of these criteria is to insure that the approval of a variance would not grant a special privilege inconsistent with the limitations on similar properties.

35. Maricopa County Drainage Regulations, Section 503 - Drainage Variance, Section 503.2 reads as follows:

Before granting a variance the Drainage Review Board shall find that each of the following criteria are met:

- a. The grant will not result in an increase in the 100-year peak flow or discharge; and*
- b. By reason of special physical circumstances, location or surrounding of the property, strict application of the Regulation would deprive the property of privileges enjoyed by similar property; and*
- c. The variance would not constitute a grant of special privilege inconsistent with the limitations on similar property; and*
- d. The variance request is the minimum necessary, considering the flood hazard, to afford relief; and*
- e. There is a showing of good and sufficient cause; and*
- f. Failure to grant the variance would result in exceptional hardship to the applicant; and*
- g. Granting the variance will not result in additional threats to the public safety, health, welfare, or extraordinary public expense, create a nuisance, the victimization of or fraud on the public and that the variance does not conflict with existing local laws or ordinances.*

It is staff's opinion that the subject property is not faced by a physical hardship that warrants relief from this standard. The applicant's proposed 19-lot subdivision cannot meet the standard as currently proposed; however, a 16 or 17-lot subdivision layout would be able to comply with the Maricopa County Drainage Regulations without need for a variance to the standard.

Having said that, the Board may wish to consider the site's current R-4 zoning a special circumstance. R-4 zoning allows a minimum lot area of 6,000 square feet, but due to site aspects, the applicant is unable to enjoy the minimum lot area allowed with the current zoning entitlement. The site is irrigated by CHCID and there is no sewer service readily available. CHCID requires one gross acre per lot for flood irrigation service. A minimum $\frac{3}{4}$ acre is required for a conventional on-site septic system. The applicant is proposing lots of at least 35,000 square feet in area

36. The problem with on lot retention, especially on these moderated-sized lots, is that it is not very popular with the future owners who do not want the standing water in their yard nor do they want to have yard space that they cannot use for additional structures or pools. Historically, these on-lot basins are filled in by the new or future home owners and they become a regulatory nightmare. In the absence of a homeowners association, there is no method to ensure that the on-lot retention will be enforced. Even with a homeowner's association Maricopa County can not be certain that the on-lot basins will be maintained. Not only has the intent of the basins to minimize runoff been lost, but now whenever property owner wishes to construct a new structure, whether it is a storage shed, garage or pool there will be a minimal area within which to build. To redesign the retention at this time, to accommodate the required volumes, results in a deeper and more intrusive basin. This seldom is very popular with the present or future property owners.
37. Staff believes that there is a viable alternative to on-lot retention available to the applicant. Since the subject site is a little more than 20 acres and the underlying zoning is R-4, the applicant could reduce the overall number or size of the proposed parcels and provide larger retention tracts set aside solely for that function. This action would remove a little more than two acres and would be sufficient for the required retention. There would be fewer lots but as platted, the parcels would still be oversize and the larger retention basins would relieve the conflict posed between wastewater and stormwater and still allow for flood irrigation or future changes by a homeowner. Setting aside tracts dedicated for retention would require a homeowners association for continued maintenance of the retention basin(s). However, this alternative may be less viable if case Z2005006 is approved, rezoning the site to Rural-43 RUPD with a minimum lot area of 35,000 square feet.
38. The applicant is proposing that individual parcels will be served with water provided for by the Chandler Heights Citrus Irrigation and Water District (CHCID) and that the lots will be graded for both flood irrigation and stormwater retention. The applicant has stated that the ability to pond on-site for irrigation will also serve to hold peak stormwater runoff. CHCID is supportive of the subdivision proposal, including the requested drainage variance (see attached letter).
39. The applicant has modified his subdivision proposal to reduce the area of some of the proposed lots and adding a common retention basin. Staff believes that even with those changes to the subdivision layout, there remain questions whether the on-site retention can accommodate peak stormwater runoff without resulting in threats to public safety, health, welfare - or to public or private property - should this drainage variance be granted to the Sonterra subdivision as proposed. Staff therefore recommends denial of this drainage variance.

Recommendation: (BA2005193)

40. Staff recommends **denial** of this drainage variance request based on the following:
- There are no special physical circumstances that deprive the property privileges enjoyed by similar property.
 - The variance constitutes a grant of special privilege inconsistent with the limitations of similar property.
 - The request conflicts with the intent of the Drainage Regulations for Maricopa County.
41. If the Board finds that a reasonable use of the property cannot be made without this variance, then this requests may be approved, subject to the following stipulations:
- a) Substantial conformance with the "Drainage Area Map for Sonterra" dated March 8, 2006.
 - b) Prior to final plat approval, the applicant shall provide lot specific diagrams showing property lines, building area, projected septic locations, and projected retaining areas to the Maricopa County Environmental Services Department (MCESD) for review and acceptance.
 - c) Compliance with the will-serve letter from Chandler Heights Citrus Irrigation District (CHCID) dated December 7, 2005.
 - d) All lots in Sonterra subdivision shall have septic systems in the front yard only. This shall be noted and illustrated on the final plat.
 - e) All lots in Sonterra subdivision shall have retention basins in the rear yard. This shall be noted and illustrated on the final plat.
 - f) A homeowners association (HOA) will be formed to maintain all berms necessary for on-lot retention in the rear of each lot of Sonterra subdivision. The HOA shall also own and maintain the interior street and drainage system and the common retention basin. This shall be noted on the final plat.
 - g) The final plat for Sonterra subdivision shall contain a note indicating that the construction plans for any accessory structures, buildings, uses proposed in the rear yard of lots shall be certified by a registered civil engineer indicating that the rear 2/3 of the yard will still retain its pro rata stormwater runoff.

mjlw/dvg

Attachments: Case Map BA2005193
Zoning Map
Z2005006 Zoning Exhibit, Proposed Rural-43 RUPD Zoning
Case Map Z2005006
Assessor Map
Preliminary Plat (January 6, 2006)
Final Plat and Drainage Area Map (March 8, 2006) (3 pages)
Brungard E-mail (excerpt 2 pages, including a Proposed On-lot Retention
Detail)
Application
Supplemental Questionnaire
Drainage Review comments in memo (March 30, 2006)
Environmental Services Department E-mail (April 21, 2006)
CHCID will-serve letter
Site Photographs (3 pages)